

**Notice of Allowability**

Application No.

10/828,633

Examiner

Demetrius R. Pretlow

Applicant(s)

RICHARDSON, JOHN G.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to April 19, 2004.
2. ☒ The allowed claim(s) is/are 1-62.
3. ☒ The drawings filed on 19 April 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 4/19/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

## DETAILED ACTION

### *Allowable Subject Matter*

Claims 1-62 are allowed.

The best prior art of record particular, Baglio et al. teach performance of estimation of surface resistivity. However Baglio et al. does not teach the following claim limitations.

The primary reason for the allowance of claims 1-16 is the inclusion of the method steps of measuring electrical resistance along a plurality of measurement lines, the plurality of measurement lines comprising line segments extending between each probe location and at least some other probe locations in the plurality of probe locations; analyzing the measured electrical resistances to determine a lumped parameter resistance model along the plurality of measurement lines; and estimating an electrical resistivity value at a selected location on the conductive film encompassed by measurement lines extending between at least three of the plurality of probe locations. It is these steps found in each of the claims, as it is **claimed in the combination**, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the allowance of claims 17-32 is the inclusion of the method steps of measuring electrical resistance along a plurality of measurement lines, the plurality of measurement lines comprising line segments extending between each probe location and at least some other probe locations in the plurality of probe locations; analyzing the measured electrical resistances to determine a lumped parameter

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resistance model along the plurality of measurement lines', and estimating an electrical resistivity value at a selected location on the conductive film encompassed by measurement lines extending between at least three of the plurality of probe locations.. It is these steps found in each of the claims, as it is **claimed in the combination**, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the allowance of claims 33-47 is the inclusion of the method steps of measuring electrical resistance along a plurality of measurement lines, the plurality of measurement lines comprising line segments extending between each probe location and at least some other probe locations in the plurality of probe locations; analyzing the measured electrical resistances to determine a lumped parameter resistance model along the plurality of measurement lines; and estimating an electrical resistivity value at a selected location on the conductive film encompassed by measurement lines extending between at least three of the plurality of probe locations. It is these steps found in each of the claims, as it is **claimed in the combination**, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the allowance of claims 48-62 is the inclusion of the limitations of an a signal controller operably coupled to e ach of the plurality of probes and configured for selecting at least one pair of probes of the plurality of probes at any given time; a signal sampler operably coupled to the signal controller and configured for sampling the electrical resistance between probes of the selected at least one pair of

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probes; and a processor operably coupled to the signal sampler and configured for: analyzing a plurality of sampled electrical resistances to determine a lumped parameter resistance model; and estimating an electrical resistivity value at a selected location on the conductive film encompassed by at measurement lines extending between least three of the plurality of probe locations. It is these limitations found in each of the claims, as they are **claimed in the combination**, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Demetrius R. Pretlow whose telephone number is (571) 272-2278. The examiner can normally be reached on Mon.-Fri. 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Demetrius R. Pretlow

 6/14/05  
MICHAEL NGHIEM  
PRIMARY EXAMINER